DOCUMENT RESUME

ED 407 632 CG 027 716

AUTHOR Venable, William Mark; Thompson, Bruce
TITLE Caretaker Psychological Factors Predicting Compliance with Children's Psychotherapy Needs.
PUB DATE 24 Jan 97
NOTE 37p.; Paper presented at the Annual Meeting of the Southwest Educational Research Association (Austin, TX, January 23-25, 1997).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Adolescents; Caregiver Role; *Caregivers; Children; *Compliance (Psychology); Elementary Secondary Education; Personality; *Predictor Variables; Psychological Patterns; *Psychotherapy
IDENTIFIERS *Caregiver Attitudes; *Caregiver Behavior

ABSTRACT

The importance of ascertaining and effectively treating psychological problems in children is difficult to overstate. Since compliance is particularly important, the psychological factors associated with caretakers' compliance regarding children's psychotherapy were examined here. Data were collected on the 85 primary caretakers of 85 children who applied for counseling at a number of community mental health centers or who received private practitioner care. The general hypothesis of the study was that scores on (1) general, (2) intrapunitive hostility, (3) extrapunitive hostility, (4) paranoid ideation, (5) depression, and (6) anxiety would discriminate caretakers who prematurely terminated their children's therapy (group one) from those caretakers who met therapeutic goals (group two) and from those caretakers whose children did not meet therapeutic goals but who attended at least ten therapy sessions (group three). Analysis showed that membership in group two was the most difficult to predict using the six variables above. One variable--intrapunitive hostility (self-criticism and delusional guilt)--was seen as a powerful factor in whether or not a caretaker will remove a child prematurely from therapy. While low self-esteem and guilt may help define this phenomenon, the factor warrants additional investigation. Contains 45 references. (RJM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

markv.wp1 1/19/97

ED 407 632

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

B. Thompson

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CARETAKER PSYCHOLOGICAL FACTORS PREDICTING COMPLIANCE WITH CHILDREN'S PSYCHOTHERAPY NEEDS

William Mark Venable
Dallas VA Hospital

Bruce Thompson
Texas A&M University
and
Baylor College of Medicine

Running Head: Psychotherapy Compliance

Corresponding Au's Address:
Bruce Thompson
TAMU Dept Educ Psyc
College Station, TX 77843-4225
409/845-1335
FAX 862-1256
e-mail: E100BT@TAMVM1.TAMU.EDU

Paper presented at the annual meeting of the Southwest Educational Research Association (SERA), Austin, TX, January 24, 1997. This paper was based on the dissertation by the senior author, and won the *1997 SERA Outstanding Dissertation Award*.

CG027716

BEST COPY AVAILABLE

ABSTRACT

The present study examined the psychological factors associated with caretakers' compliance with their children's psychotherapy. Data were collected on the 85 primary caretakers of 85 children in Texas who applied for counseling at a number of community mental health centers or who received private practitioner care. The general hypothesis of the study was that scores on (a) general, (b) intrapunitive and (c) extrapunitive hostility, (d) paranoid ideation, (e) depression and (f) anxiety would discriminate caretakers who prematurely terminated their children's therapy from those caretakers whose children met therapeutic goals and from those caretakers whose children did not meet therapeutic goals but who attended at least 10 therapy sessions. The effect sizes associated with intrapunitive hostility across the termination groups were particularly noteworthy.

The importance of ascertaining and effectively treating psychological problems in children is difficult to overstate. A child who is treated effectively may overcome problems which would otherwise result in developmental delays, dysfunctional behaviors, or emotional distress (Eyberg, 1992). Additionally, childhood problems that are treated effectively and early are less likely to develop into adult pathology (Levitt, 1971). Consequently, treatment compliance and drop-out rates in psychotherapy have received considerable attention (Deane, 1991). Pekarik (1985) describes this problem as "one of the greatest single obstacles to the effective delivery of mental health services" (p. 114).

The dropout rate for child and family therapy is somewhat higher than that for adult therapy. Dropout rates for adults range between 30% to 60% while child and family therapy dropout rates are generally about 50% (Gaines & Stedman, 1981; Shapiro & Budman, 1973; Singh, Janes, & Schechtman, 1982; Weisz, Weiss, & Langmeyer, 1987).

Much of the previous compliance research has focused on adult clients. A number of researchers have explored the *external* or demographic variables that predict treatment compliance. Among these variables have been sex, race, religion, age, education, marital status, and occupation, and social class (cf. Davis, 1968; Mohl, Martinez, Ticknor, Huang, & Cordell, 1991). Others have investigated relationships involving *internal* factors, such as the patient's diagnosis, attitudes, verbal ability, psychiatric history and substance-abuse history (Mohl, Martinez, Ticknor, & Appleby,

1989). While such factors have been shown to predict adults' compliance rates, these same factors may not necessarily predict children's dropout rates.

Although the dropout rate for children is high, there has been relatively little research investigating factors associated with this phenomenon. Baekeland and Lundwall (1975) reviewed overall dropout rates and included only five articles pertaining to the treatment of children. This represents only 1.4% of the 362 articles they reviewed and illustrates a disproportionate emphasis in the literature. While about 25% of all patients in community mental health centers are under the age of 18 (cf. National Institute of Mental Health, 1981), only about 1% of dropout investigations were devoted to child treatment when Pekarik and Stephenson (1988) conducted their review. This small proportion of studies devoted to children has remained relatively constant through the years.

While treatment compliance with any age group is important, compliance with child psychotherapy is affected by unique variables. Unlike most adults, a child usually cannot make the commitment to attend therapeutic sessions and may not be in a position to decide if therapy will be undertaken at all. As Pekarik and Stephenson (1988) pointed out, the "critical difference between adults and children in therapy is that adults decide for themselves whether to enter and when to discontinue their own treatment, but a parent usually makes the decisions for a child to enter and terminate treatment" (p. 316).

Nevertheless, some studies have examined the process of attrition in psychiatric clinics treating children. Factors studied have included sex and age of the child (e.g., Ewalt, Cohen, & Harmatz, 1972; Ross & Lacey, 1961; Singh, Janes & Schechtman, 1982), socioeconomic status of the family as well as other demographic descriptors (e.g., Fischer, 1975; Lake & Levinger, 1960), distance from the clinic (Gaines, 1978), length of time on a waiting list (e.g., Cole & Magnussen, 1967), referral source (e.g., Cohen & Richardson, 1970), parental attitudes toward the child or toward the treatment (e.g., Ewalt et al., 1972), and treatment characteristics (e.g., Farley, Peterson, & Spanos, 1975). While these studies have yielded useful information about treatment compliance, the studies did not take into account the specific personality characteristics of children's caretakers.

Regarding caretaker personality variables, it has been pointed out that parents who were viewed as uncooperative, who had problems themselves, or who were reluctant to accept change in themselves were more likely to cause their children to drop out of treatment (cf. Gould, Shaffer, & Kaplan, 1985; LeFave, 1980; Singh et al., 1982). Personality factors have been shown to influence treatment compliance among a variety of patients (Fals-Stewart & Lucente, 1993), while an investigation by Agrawal, Saksena and Singh (1978) isolated "the attitudes of mothers as one of the causative factors in the emotional problems of the children" (p. 111).

The four caretaker personality factors investigated in the present study in relation to children's treatment compliance were:

(a) hostility, (b) anxiety, (c) depression, and (d) paranoia. Regarding patient *hostility*, there are some reports indicating that there is a negative relationship between hostility and treatment compliance (Pugh, 1983). For example, Raskin (1961) studied the association of patient variables with compliance by 179 psychiatric out-patients. Patients who were totally non-compliant were rated prior to treatment as more overtly hostile and aggressive.

May (1977) provided insight on various linkages between *anxiety* and treatment compliance:

> Anxiety and hostility are interrelated; one usually generates the other. First, anxiety gives rise to hostility. This can be understood in its simplest form in the fact that anxiety, with its concomitant feelings of helplessness, isolation, and conflict, is an exceedingly painful experience. One tends to be angry and resentful toward those responsible for placing him in such a situation of pain... Second, hostility in anxious persons gives rise to increased anxiety... There is ground for believing that, even though hostility may be the specific affect present in many situations, anxiety is often present below the hostility. (pp. 230-231)

It may be understood from May's (1977) statements that the parent who is anxious due to having to have a child in therapy may well become hostile.

While studies on *depression* have shown varying results of compliance with psychotherapy in the individual who is depressed (Fisher, Winne, & Ley, 1993), caretaker depression may also be a factor in child psychotherapy non-compliance (Dover, Leahy, & Foreman, 1994). A depressed caretaker may simply succumb to hopelessness and frustration, and may withdraw from all forms of social interaction. It was hypothesized that, if the caretaker is acutely depressed, he or she will tend to terminate the child's psychotherapy prematurely.

Finally, although the literature does not reveal any conclusive relationships between *paranoia* and treatment compliance, the theoretical relationship between paranoia and projection (Modlin, 1963) may have some bearing on the behavior that a parent presents to the child's therapist. That is, a parent who is experiencing stress as well as paranoid ideation, may develop unrealistic or unwarranted negative perceptions of the therapist and may, thus, withdraw himself or herself (and the child) from the therapist.

Based upon these limited previous studies and this logic, it was hypothesized that scores on (a) general, (b) intrapunitive and (c) extrapunitive hostility, (d) paranoid ideation, (e) depression and (f) anxiety would discriminate caretakers who prematurely terminated their children's therapy from those caretakers whose children met therapeutic goals and from those caretakers whose children did not meet therapeutic

goals but who attended at least 10 therapy sessions.

Method

Participants

Data were collected regarding the primary caretakers of female and male children who applied for counseling at community mental health centers or private practice services in Texas. Primary caretakers were included in the study if the child for whom they were seeking therapy was between 3 and 18 years of age. Children presenting with any DSM-IV diagnosis that was accepted for treatment at the mental health centers or by private practitioners were included in the current study. Primary caretakers may have been parents, foster parents, guardians, grandparents or other adults who possessed legal responsibility for the child.

Of the 85 caretakers (each with one child-client) represented in the sample, 31 were non-compliant with their children's therapy while 54 were compliant. The 85 study participants were categorized into one of three groups: (a) caretakers whose children (n_1 = 31) attended fewer than 10 therapy sessions and who did not meet therapeutic goals, (b) caretakers whose children (n_2 = 18) met therapeutic goals, or (c) caretakers whose children (n_3 = 36) attended at least 10 sessions although they had not meet their therapeutic goals within this time frame. Within the time frame of the study, all 85 children had the opportunity to complete more than 10 sessions.

The later two compliance groups were created to avoid confounding compliance in the form of meeting goals with compliance in the form of attending sessions without yet having met goals. Ten sessions were chosen as a criterion for differentiating group "C" children from the other children, because attending 10 sessions falls within guidelines generally established in a managed-care environment for the number of sessions required for therapeutic effect in a short-term model (Poynter, 1994). These data were collected by consulting chart notes or the representations of the therapists.

As reported in Table 1, the sample consisted of 79 female caretakers and 6 male caretakers with a mean age of 35.32 years (SD = 7.41). The majority of the participants were Caucasian (78.8%), with 11.8% being African-American, 3.5% Hispanic, 3.5% Asian-American, and 2.4% Other. Roughly a third (36.5%) of the caregivers had income greater than $12,500, while 21.2% of the sample made less than $5000, 16.5% made between $7501 and $10000, 11.8% made between $10001 and $12500, and 9.4% made between $5001 and $7500. Regarding the education of the caregivers, the mean years of education was 13.00 (SD = 2.99).

The majority of the caretakers (41.2%) reported being referred by various sources other than those listed on the demographics form. Additionally, 20.0% were self-referred, 16.5% were referred by a friend or relative, 11.8% by their

child's physician, 7.1% by the police or the court, and 2.4% by their child's school.

A portion of the participants (21.2%) were required to bring their child to therapy, the major referral sources being the Department of Human Services/Children's Protective Services (7.1%), the courts (4.7%), and other, unspecified (8.2%). The majority (78.8%) were not required by any source to bring their child to services.

The mean distance from home to the center was 13.88 miles (SD = 14.71). The most common distances from the clinic reported were 10 and 15 miles (11.8% and 17.6% of the sample, respectively). Other reported distances ranged from one (2.4%) to 100 (1.2%) miles. Of those reporting this factor, 52.6% lived within 10 miles of the clinic and 81.6% lived within 15 miles of the clinic.

Transportation to and from appointments was usually provided in the caretaker's own car (83.5%). Some participants were driven free by a neighbor or relative (7.1%), while others (1.2%) paid a friend or neighbor for transportation; public bus system was used by 4.7%, 1.2% walked, and 2.4% reported other means of transportation.

The social composition in the child's home was varied. The preponderance (83.3%) of the caretakers were mothers with whom the children lived. The spouses of 28.2% of the participants lived in the home, with 18.8% of the participants reporting that the child's father lived in the home. Few

participants reported that a friend lived with them (3.5%). Third generation relatives (the child's grandmother or grandfather) generally did not live in the home with the child. Only 4.0% of the caretakers reported their own mothers living with them and 2.4% reported their fathers living with them. Nearly half (49.4%) of the participants reported various, unspecified others living in the home with them.

As reported in Table 2, 10 of the 40 therapists (25.0%) in the present study were male and worked with 21.2% of the sample of 85 clients. The 30 therapists (75.0%) who were female worked with 78.8% of the sample of 85 clients. Thirty-four (34) of the 40 therapists held masters degrees and these individuals worked with 80.0% of the 85 clients; 6 of the 40 therapists held doctoral degrees and worked with 20% of the 85 clients. Between one and three clients were seen by most therapists and only two therapists saw nine or more clients. The therapists each worked in one of eight sites, each involving from three to 30 of the study's 85 participants.

Instrumentation

The Symptom Checklist-90 (SCL-90-R, Derogatis, 1983) and the Hostility and Direction of Hostility Questionnaire (HDHQ, Foulds, Caine & Creasy, 1960) were presented to the primary caretaker of each child upon that child's admission into counseling. A demographic form and an informed consent form were also completed by participants.

The Symptom Checklist-90-R (Derogatis, 1983) is a self-

report symptom inventory comprised of 90 items. Each item is measured on a 5-point Likert-type scale, ranging from "0" (not at all) to "4" (extremely). The SCL-90-R is commonly used to measure psychological distress and yields scores on various global measures of distress and nine subdimensions, including four of primary interest in the present study: general hostility, anxiety, depression, and paranoia.

The Hostility and Direction of Hostility Questionnaire (HDHQ) was developed by Caine, Foulds, and Hope (1967) as a test to evaluate various subdimensions of hostility. Various forms of the questionnaire has been used with various scoring keys each involving roughly 50 items extracted from the MMPI. The response format is true-false.

The HDHQ form employed here included scales measuring intrapunitive hostility (self-criticism and delusional guilt) and extrapunitive hostility (urge to act out hostility, criticism of others, and projected or delusional hostility). The intrapunitive hostility scale consisted of MMPI items 61, 82, 86, 102, 106, 129, 142, 147, 202, 209, 257 (reverse scored), 357, 396, and 418. The extrapunitive hostility scale consisted of MMPI items 16, 28, 35, 35, 39, 80, 94, 96 (reverse scored), 97, 109, 110, 118, 121, 123, 136, 139, 145, 197, 226, 233, 234, 250, 250, 265, 269, 280, 316, 336, 347 (reverse scored), 355, 385, and 396.

Results

Because it is scores--and not tests--which are reliable,

it is important to investigate the score integrity for the data in hand in any given study (Thompson, 1994b). In the present study, the alpha coefficients associated with the six scores of interest for the 85 caretakers were: SCL-90-R general hostility, .84; anxiety, .92; depression, .93; paranoia, .83; HDHQ intrapunitive hostility, .85; and extrapunitive hostility, .81.

The scores were deemed sufficiently reliable to permit their meaningful use in substantive inquiry. T-scores based on a normal normative sample for the SCL-90-R were employed for the analysis. HDHQ scores were simply total scores on the two HDHQ scales. Table 3 presents descriptive statistics on the six variables.

The relationships between scores on the six predictor variables and membership in these three groups was explored using predictive discriminant analysis (Huberty, 1994). The homogeneity (equality) of the three variance/covariance matrices assumption was met (F=0.99, df = 42/10378.4, p = .49), so a linear classification rule was employed.

Figure 1 presents the territorial map based on the discriminant function scores of the 85 participants on each of the two possible discriminant functions. The numbers in the map (i.e., "1", "2", or "3") indicate actual membership by a given participant in one of the three classifications discussed previously, respectively. The "hit rate" for correctly classifying the 85 participants using the scores on

the six predictor variables was 56.47%.

However, the hit rates for predicting the groups differed appreciably. The hit rates for the three groups were 77.4%, 11.1%, and 61.1%, respectively. Of particular note was the high hit rate (77.4%) for the 31 participants who withdrew from therapy.

Table 4 presents standardized discriminant function coefficients (directly analogous to regression beta weights) and structure coefficients (directly analogous to regression or to canonical structure coefficients) from the analysis. The table also presents "leave-one-out" (L-O-O) statistics from each of the six predictor variables. In an L-O-O analysis (Huberty, 1994), each predictor is in turn eliminated from the analysis. The predictor variable that, when not used, yields the worst hit rate is the best single predictor variable.

Discussion

The importance of compliance in therapy has been a focus of research for many years. While many factors have been identified as having some effect on a number of areas of compliance (cf. Dover et al., 1994), few researchers have addressed the fact that children's compliance depends so heavily on caretakers' attitudes and characteristics. Identifying the factors that predict caretakers' compliance with their children's therapy could have important implications for therapy efficacy.

The general hypothesis of the study was that caretakers

who prematurely terminated their children's therapy would have scores on general, intrapunitive and extrapunitive hostility, paranoid ideation, depression and anxiety that were higher than those of caretakers who did not terminate prematurely. The analyses were conducted with a multivariate technique, predictive discriminant analysis (Huberty, 1994), to avoid inflating experimentwise Type I error rates and to honor a substantive reality in which all variables interact simultaneously (Thompson, 1994a, 1994c).

As reported in Figure 1, membership in group 2 (the children who met therapeutic goals) was the most difficult to predict using the six variables employed in the present study. Few of these 18 children are within their correct territory within the map. Of course, the predictors were primarily selected to discriminate noncompliant caregivers from other caregivers, so this result was not entirely unexpected.

In the present study one factor, *intrapunitive hostility*, was found to have the greatest relationship with caretaker compliance. The eta^2 value associated with the means reported in Table 3 was 12.6%. This is a moderate-to-large effect size (Cohen, 1988) indicating that knowledge of membership in the three groups explained 12.6% of the variance in this set of hostility scores.

However, as reported in Table 4, when all six predictor variables were used to predict compliance, the overall "hit rate" was 56.47%. The predictor which "hurt" the least when

it was not used in the leave-one-out (L-O-O) multivariate analyses was intrapunitive hostility. When this variable was dropped, the hit rate remained 56.47%, while the hit rate for the noncompliant caretaker group improved from 77.4% to 87.1%. Thus, the predictive power of this variable is also present in the aggregation of some of the other predictors, and the variable may provide misinformation regarding persons who are "fence riders" near the boundaries of the territorial map presented in Figure 1.

The mean of the 31 noncompliant caretakers was 6.19 (SD = 3.83), while the means of the caretakers whose children met therapeutic goals or who attended at least 10 sessions were 3.78 (SD = 2.77) and 3.68 (SD = 2.77), respectively, as reported in Table 3. Thus, the mean intrapunitive hostility score of the noncompliant caretakers was almost a full standard deviation larger than the means of the caretakers in the other two groups. This is a very large effect size, indeed (Cohen, 1988)!

If Intrapunitive Hostility is found to be present in a caretaker who presents a child for therapy, it can be predicted that the caretaker will remove the child from therapy prematurely more often than a caretaker who does not experience intrapunitive hostility. It would be well to further research this factor. Other studies investigating compliance and hostility (Altschuler, Black, Trompeter, Fitzpatrick & Peto, 1991; Flanagan & Wagner, 1991; Gould et

al., 1985; Le Fave, 1980; Pugh, 1983) have found a range of effect sizes. However, all of these prior studies measured total hostility rather than distinguishing intrapunitive from extrapunitive hostility. In terms of predicting compliance behaviors of caretakers, it may be important to distinguish between these two aspects of hostility.

The predictor, *depression*, also had a noteworthy effect size as regards compliance in the present study. Other studies have reported inconclusive results as regards the relationships of depression with compliance (Fisher et al., 1993; Pugh, 1983; Moore & Paolillo, 1984). The eta^2 univariate effect size for the variable was 6.6%. The means of the caretakers of the three groups were 63.29 (SD = 10.02), 62.00 (SD = 10.64), and 57.53 (SD = 10.01), respectively, as reported in Table 3. Thus, more depressed caretakers either tend to be noncompliant or have children who meet therapeutic goals, as against be willing to commit to longer duration interventions. Of course, it is possible that the depressed caretakers of children who met therapeutic goals (group 2 children) might also have been disinclined to continue intervention if their children had instead not met goals in fewer than 10 sessions.

Scores on the *extrapunitive hostility* HDHQ scale had the third highest eta^2 effect size (3.2%). The means of the caretakers of the three groups were 8.02 (SD = 5.26), 6.20 (SD = 3.45), and 6.38 (SD = 4.55), respectively, as reported in

Table 3. Again, more hostile caretakers were more likely to terminate therapy for their children before therapeutic goals were met. The differences in these means were roughly a third to a half of a standard deviation.

In the L-O-O multivariate analysis, the predictors which "hurt" hit rate the most when the variables were left out involved the *paranoia* and the *general hostility* scores from the SCL-90-R. The hit rate when these variables were dropped deteriorated from 56.47% to 50.59% (74.2% in the noncompliant group) and to 50.59% (71.0% in the noncompliant group), respectively. The eta^2 values for the two variables were 0.5% and 0.4%, respectively.

The HDHQ proved to be a useful instrument for distinguishing extrapunitive hostility and intrapunitive hostility between compliant and non-compliant caretakers. Following Eysenck's (1972) recommendation, the present study utilized these two subscales rather than a total hostility score for the HDHQ. Scores on these two HDHQ scales only had 45.8% common variance (r=.68).

The differentiation of types of hostility is important, because compliance may have more to do with one's feelings about oneself (e.g., intrapunitive hostility) than one's feelings about a therapist, a receptionist or an institution. Further, in efforts to assure compliance with a child's appointments, a therapist may attempt to address in some manner the caretaker's issues of self-hate and low-confidence

(Miller & Hafner, 1989), depression, guilt, anger, low self-esteem and anxiety (i.e., traits which seem to be associated with intrapunitive hostility).

However, one limitation of the present study is that therapist efficacy was not considered. For example, a caregiver might be more likely to terminate therapy when care is provided to a child by a less effective therapist. However, an attempt was made to control this influence in the present study by utilizing caretakers receiving services from 40 therapists--the hope was that therapist skills to some degree "washed out" over this relatively large number of therapists.

Also, while caretakers should be given credit for assuring that a child attends therapy sessions, for practical reasons different qualities of compliance were not considered in the study. For example, it might be useful to know if a caretaker made recommended changes at home or in the manner of relating to the child. Additionally, a passive-aggressive caretaker may continue to blame a child for a problem, bring the child to therapy regularly, and yet still undermine that therapy at home.

In summary, the results of the present study have important implications for therapists who work with children. It is evident from the data that the goal of helping children with psychological problems is not dependent solely on the relationship between the child and the therapist. The personality characteristics of the caretaker are also critical

in the treatment of children because these characteristics are associated with caretaker compliance with children's therapy.

A behaviorally impressive factor, intrapunitive hostility, brings together a number of elements of personality. While low self-esteem and guilt may help define this phenomenon, the factor warrants additional investigation. Anxiety and depression, while often included in the personality of one who manifests intrapunitive hostility, are factors that may also work individually to negatively affect caretakers' compliance with their children's therapy.

At least two therapeutic implications of the present study can be noted:

1. While it is often not feasible to ask a caretaker to complete a detailed personality instrument in addition to the forms that must be filled out during the application process, the caretaker who presents as depressed, anxious, self-deprecating or evidences other symptoms of low self-esteem or guilt could be counseled and informed of the therapeutic process. Additionally, the caretaker's own needs and concerns might be dealt with over one or two sessions in a manner that would alleviate some of the elements of intrapunitive hostility. This time spent with the caretaker may, in turn, provide a therapeutic environment that would maximize the likelihood of the caretaker's compliance with the child's therapy.
2. The number of sessions undertaken may have additional

implications related to a managed-care service environment. There was some suggestion in the data that depressed or anxious caretakers whose children do not achieve therapeutic goals in a relatively brief time may withdraw their children prematurely. Consequently, with the children of these caretakers, achievable goals should be developed with the caretaker so that specific successes are demonstrated within reasonable time periods.

The concessions to caretakers' dispositions may well be worth the effort in terms of children's therapy successes.

References

Agrawal, F., Saksena, N. K., & Singh, S. B. (1978). Child-rearing attitudes of mothers of emotionally adjusted and mal-adjusted children. Indian Journal of Clinical Psychology, 5(2), 111-116.

Altschuler, J., Black, D., Trompeter, R., Fitzpatrick, M., & Peto, H. (1991). Adolescents in end-stage renal failure: A pilot study of family factors in compliance and treatment considerations. Family Systems Medicine, 9(3), 229-247.

Baekeland, R., & Lundwall, L. (1975). Dropping out of treatment: A critical review. Psychological Bulletin, 82, 738-783.

Caine, G. M., Foulds, G. A., & Hope, K. (1967). Manual of the Hostility and Direction of Hostility Questionnaire (HDHQ). London: University of London Press.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). New York: Academic Press.

Cohen, R. & Richardson, C. (1970). A retrospective study of case attrition in a child psychiatric clinic. Social Psychiatry, 5, 77-83.

Cole, J. K. & Magnussen, M. G. (1967). Family situation factors related to remainers and terminators of treatment. Psychotherapy, Theory, Research and Practice, 4, 107-109.

Davis, M. S., (1968). Physiologic, psychological and

demographic factors in patient compliance with doctors' orders. Medical Care, 6(2), 115-122.

Deane, F. P. (1991). Attendance and drop-out from outpatient psychotherapy in New Zealand. Community Mental Health in New Zealand, 6(1), 34-51.

Derogatis, L. R. (1983). SCL-90-R Manual II. Towson, MD: Clinical Psychometric Research.

Dover, S. J., Leahy, A., & Foreman, D. (1994). Parental psychiatric disorder: Clinical prevalence and effects of default from treatment. Child Care, Health and Development, 20(3), 137-143.

Ewalt, P., Cohen, M., & Harmatz, J. (1972). Prediction of treatment acceptance by child guidance clinic applicants: An easily applied instrument. American Journal of Orthopsychiatry, 42, 857-864.

Eyberg, S. M. (1992). Assessing therapy outcome with preschool children: Progress and problems. Journal of Clinical Child Psychology, 21(3), 306-311.

Eysenck, H. J. (1972). Review. In O. K. Buros (Ed.). The seventh mental measurements yearbook (pp. 184-185). Lincoln, NE: University of Nebraska Press.

Fals-Stewart, W., & Lucente, S. (1993). An MCMI cluster typology of obsessive-compulsives: A measure of personality characteristics and its relationship to treatment participation, compliance and outcome in behavior therapy. Journal of Psychiatric Research, 27(2),

139-154.

Farley, O. W., Peterson, K. D., & Spanos, G. (1975). Self-termination from a child guidance center. Community Mental Health Journal, 11, 325-334.

Fischer, R. W. (1975). Scoring parental responses to an application form as a method to discriminate unilateral from bilateral terminations at a child guidance clinic. Dissertation Abstracts International, 36, 1915-1916.

Fisher, P. M., Winne, P. H., & Ley, R. G. (1993). Group therapy for adult women survivors of child sexual abuse: Differentiation of completers versus dropouts. Psychotherapy, 30(40), 616-624.

Flanagan, D. A. J., & Wagner, H. L. (1991). Expressed emotion and panic-fear in the prediction of diet treatment compliance. British Journal of Clinical Psychology, 30, 231-240.

Foulds, G. A., Caine, T. M., & Creasy, M. A. (1960). Aspects of extra- and intropunitive expression in mental illness. British Journal of Psychiatry, 106, 599-610.

Gaines, T. (1978). Factors influencing failure to show for a family evaluation. International Journal of Family Counseling, 6, 57-61.

Gaines, T., Jr., & Stedman, J. M. (1981). Factors associated with dropping out of child and family treatment. American Journal of Family Therapy, 9, 45-51.

Gould, M., Shaffer, S., & Kaplan, D. (1985). The

characteristics of dropouts from a child psychiatry clinic. Journal of the American Academy of Child Psychiatry, 24, 316-328.

Huberty, C. (1994). Applied discriminant analysis. New York: Wiley and Sons.

Lake, M. & Levinger, G. (1960). Continuance beyond application interviews at a child guidance clinic. Social Casework, 41, 303-309.

LeFave, M. K. (1980). Correlates of engagement in family therapy. Journal of Marital and Family Therapy, 6, 75-81.

Levitt, E. E. (1971). research on psychotherapy. In A. E. Bergin & S. L. Garfield (Eds.), Handbook of psychotherapy and behavior change (pp. 217-236). New York: Wiley.

May, R. (1977). The meaning of anxiety. New York: W. W. Norton.

Miller, R. J., & Hafner, R. J. (1989). HDHQ test properties for normal respondents. Personality and Individual Differences, 10(12), 1311-1318.

Modlin, H. C. (1963). Psychodynamics and management of paranoid states in women. Archives of General Psychiatry, 8, 262-268.

Mohl, P. C., Martinez, D., Ticknor, C., & Appleby, J. (1989). Psychotherapy refusers. Comprehensive Psychiatry, 30(3), 245-250.

Mohl, P. C., Martinez, D., Ticknor, C., Huang, M., & Cordell, L. (1991). Early dropouts from psychotherapy. Journal of

Nervous and Mental Disease, 179(8), 478-481.

Moore, T. W. & Paolillo, J. G. P. (1984). Depression: Influence of hopelessness, locus of control, hostility and length of treatment. Psychological Reports, 54, 875-881.

National Institute of Mental Health. (1981). Provisional data on federally funded community mental health centers, 1978-1979 (Report prepared by Survey and Reports Branch, Division of Biometry and Epidemiology, NIMH). Washington, DC: U.S. Government Printing Office.

Pekarik, G. (1985). Coping with dropouts. Professional Psychology: Research and Practice, 16, 114-123.

Pekarik, G. & Stephenson, L. A. (1988). Adult and child client differences in therapy dropout research. Journal of Clinical Child Psychology, 17(4), 316-321.

Poynter, W.L. (1994). The preferred provider's handbook. New York: Bruner/Mazel.

Pugh, R. (1983). An association between hostility and poor adherence to treatment in patients suffering from depression. British Journal of Medical Psychology, 56(2), 205-208.

Raskin, A. (1961). A comparison of acceptors and resistors to drug therapy as an adjunct to psychotherapy. Journal of Consulting Psychology, 25(4), 366.

Ross, A. O., & Lacey, H. M. (1961). Characteristics of terminators and remainers in a child guidance treatment.

Journal of Consulting Psychology, 25, 420-424.

Shapiro, R. J. & Budman, S. H. (1973). Defection, termination, and continuation in family and individual therapy. Family Process, 12, 55-67.

Singh, H., Janes, C. L., & Schechtman, J. M. (1982). Problem children's treatment attrition and parents' perception of the diagnostic evaluation. Journal of Psychiatric Treatment Evaluation, 4, 257-263.

Thompson, B. (1994a, April). Common methodology mistakes in dissertations, revisited. Paper presented at the annual meeting of the American Educational Research Association, New Orleans. (ERIC Document Reproduction Service No. ED 368 771)

Thompson, B. (1994b). Guidelines for authors. Educational and Psychological Measurement, 54(4), 837-847.

Thompson, B. (1994c, February). Why multivariate methods are usually vital in research: Some basic concepts. Paper presented as a Featured Speaker at the biennial meeting of the Southwestern Society for Research in Human Development, Austin, TX. (ERIC Document Reproduction Service No. ED 367 687)

Table 1

Demographics of the 85 Caretakers and the 85 Clients' Therapists

		Group		
	Total	Not Comply	Goals Met	Attend 10
Variable	(n=85)	(n=31)	(n=18)	(n=36)
Caretaker Gender				
Female	79	31	16	32
Male	6	0	2	4
Caretaker Ethnicity				
White	67	27	16	24
Afr. Am.	10	2	1	7
Hispanic	3	0	0	3
Asian Am.	2	0	1	1
Other	3	2	0	1
Caretaker Income				
< $5000	18	11	4	3
$5001-$7.5K	8	2	3	3
$7501-$10K	14	6	1	7
$70001-$12.5K	10	1	2	7
> $12500	31	10	8	13
Missing	4	1	0	3

Referral Source				
Caretaker	17	7	4	6
Friend/rel.	14	6	4	4
Physician	10	3	1	6
Police/court	6	4	1	1
School	2	0	1	1
Other	35	11	7	17
Missing	1	0	0	1
Transportation				
Caretaker's car	71	25	14	32
Friend free	6	4	2	0
Bus	4	2	1	1
Pay Fr./rel.	1	0	0	1
Walk	1	0	1	0
Other	2	0	0	2
Site Type				
Child guidance	48	15	11	22
Private prac.	18	9	5	4
MHMR	10	2	1	7
Comm./Family	9	5	1	3
Clients' Th. Gender				
Female	67	27	14	26
Male	18	4	4	10

Clients' Th. Educ.				
Masters only	68	25	14	29
Doctorate	17	6	4	7
Caretaker Age				
Mean	35.32	33.13	38.28	35.72
SD	7.41	6.50	6.88	7.97

Note. Since some of the 40 therapists ("Th.") provided care for more than one of the 85 children, this table describes therapists' characteristics from the 85 children's points of view. Table 2 presents the demographic characteristics of the 40 therapists.

Table 2

Demographic Characteristics of the 40 Therapists

		Group		
	Total	Not Comply	Goals Met	Attend 10
Variable	(n=40)	(n=22)	(n=15)	(n=22)
Therapist Gender				
Female	31	18	11	17
Male	9	4	4	5
Therapist Education				
Masters only	34	18	13	19
Doctorate	6	4	2	3

Note. Since some therapists provided care to children from more than one compliance group, the number of therapists in each group is greater than 40 (i.e., 22 + 15 + 22 > 40).

Table 3

Means (and Standard Deviations) of SLC-90-R and HDHQ Scale Scores

	Group			
Variable	Noncompliant (n=31)	Goals Met (n=18)	10 or more Sessions (n=36)	Compliant (n=54)
Hostility	57.87 (11.49)	59.00 (10.74)	57.22 (9.40)	57.82 (9.80)
Anxiety	57.94 (13.09)	56.39 (12.58)	53.47 (10.43)	54.44 (11.16)
Depression	63.29 (10.02)	62.00 (10.64)	57.53 (10.01)	59.02 (10.35)
Paranoia	58.22 (11.46)	55.94 (13.13)	57.56 (11.32)	57.02 (11.85)
Intropunitive	6.19 (3.83)	3.78 (2.77)	3.68 (2.77)	3.72 (2.74)
Extrapunitive	8.02 (5.26)	6.20 (3.45)	6.38 (4.55)	6.32 (4.18)

Table 4

Predictive Discriminant Analysis (PDA) Statistics

	Function I Coefs.		Function II Coefs.		Total L-O-O	Group 1
Predictor	Function	Structure	Function	Structure	Hit Rate	L-O-O Hit Rate
Hostility	-.721	.014	.459	.217	50.59%	71.0%
Anxiety	-.003	.293	.038	.280	56.47%	77.4%
Depression	.277	.425	1.305	.516	51.76%	74.2%
Paranoia	-.436	.091	-.870	-.187	50.59%	74.2%
Intrapunitive	1.194	.742	-.516	-.046	56.47%	87.1%
Extrapunitive	.134	.350	-.316	-.091	56.47%	74.2%

Note. The first four predictors were T-scores from SCL-90-R scales, while the last two hostility predictor variables were HDHQ scale scores. With all six predictors, the total hit rate was 56.47%, and was 77.4% for predicting membership in the noncompliant caretaker group. The group centroids (mean discriminant function scores) for the three groups on Function I were +.662, -.318, and -.411, respectively. The centroids on Function II were -.027, .533, and -.244, respectively.

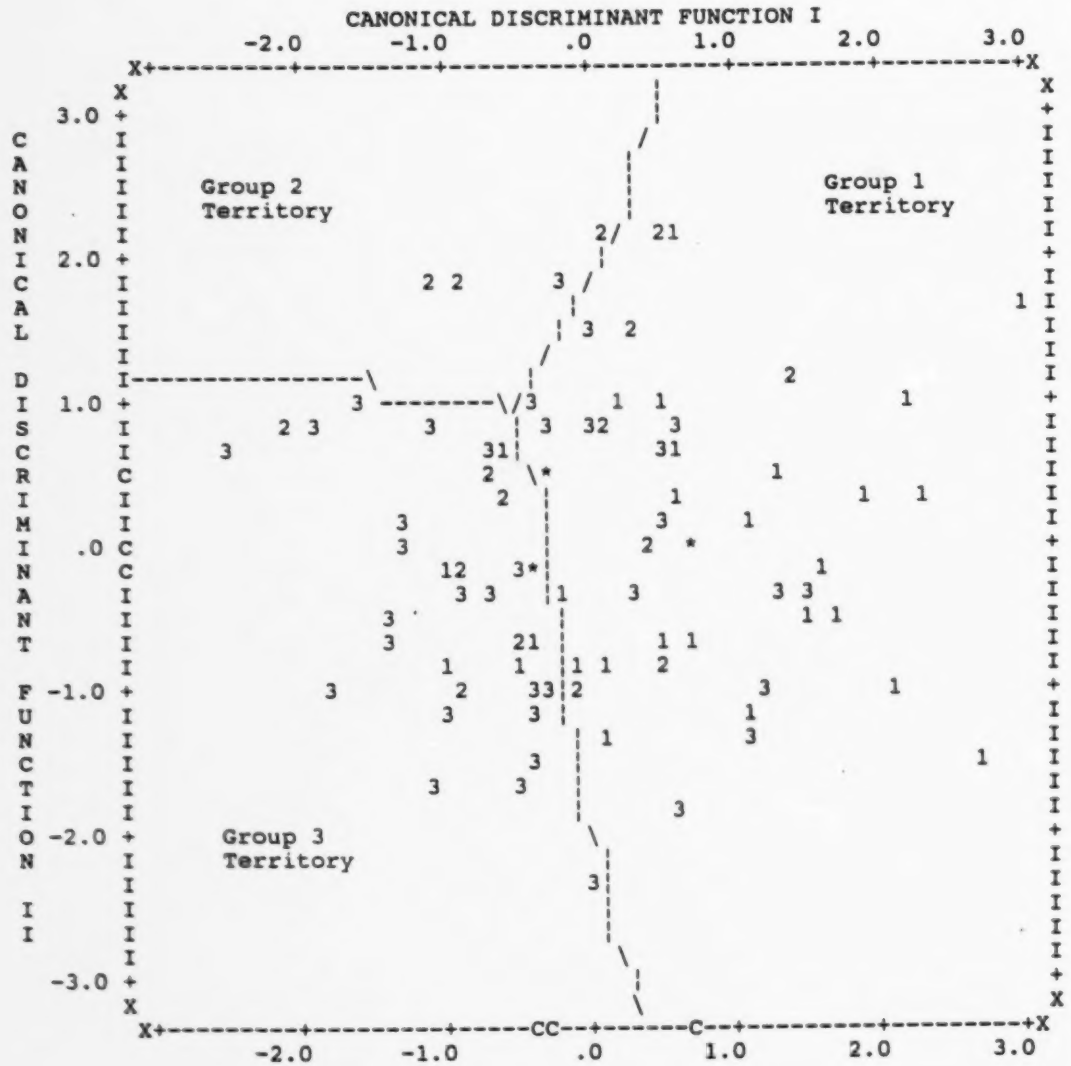

Figure 1
Territorial Map of Participants' Discriminant Function Scores